

State of Arizona
Office
of the
Auditor General

PERFORMANCE AUDIT

**ARIZONA
DEPARTMENT
OF
AGRICULTURE**

**PESTICIDE COMPLIANCE
AND
WORKER SAFETY
PROGRAM**

**Report to the Arizona Legislature
By Debra K. Davenport
Auditor General**

**September 2000
Report No. 00-16**

The Auditor General is appointed by the Joint Legislative Audit Committee, a bipartisan committee composed of five senators and five representatives. Her mission is to provide independent and impartial information and specific recommendations to improve the operations of state and local government entities. To this end, she provides financial audits and accounting services to the state and political subdivisions and performance audits of state agencies and the programs they administer.

The Joint Legislative Audit Committee

Representative Roberta L. Voss, Chairman
Senator Tom Smith, Vice-Chairman

Representative Robert Burns
Representative Ken Chevront
Representative Andy Nichols
Representative Barry Wong
Representative Jeff Groscost
(ex-officio)

Senator Keith Bee
Senator Herb Guenther
Senator Darden Hamilton
Senator Pete Rios
Senator Brenda Burns
(ex-officio)

Audit Staff

Dale Chapman—*Manager
and Contact Person (602) 553-0333*
Ann Orrico—Team Leader
Kristin Borns—Team Member
Joseph McKersie—Team Member

Copies of the Auditor General's reports are free.
You may request them by contacting us at:

Office of the Auditor General
2910 N. 44th Street, Suite 410
Phoenix, AZ 85018
(602) 553-0333

Additionally, many of our reports can be found in electronic format at:
www.auditorgen.state.az.us



DEBRA K. DAVENPORT, CPA
AUDITOR GENERAL

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

September 27, 2000

Members of the Legislature

The Honorable Jane Dee Hull, Governor

Mr. Sheldon Jones, Director
Arizona Department of Agriculture

Transmitted herewith is a report of the Auditor General, A Performance Audit of the Arizona Department of Agriculture—Pesticide Compliance and Worker Safety Program. This report is in response to a June 16, 2000, resolution of the Joint Legislative Audit Committee. The performance audit was conducted as part of the Sunset review set forth in A.R.S. §41-2951 et seq. I am also transmitting with this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

This is the seventh in a series of reports to be issued on the Arizona Department of Agriculture.

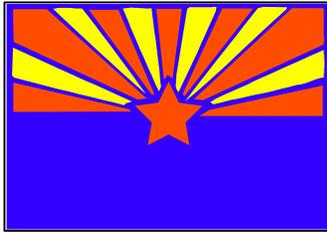
As outlined in its response, the Department does not agree with our finding that it lacks sufficient civil penalty authority to enforce state pesticide laws, but indicates it will implement the recommendations differently. However, the Department's response does not provide specifics on how it intends to implement the recommendations. The Department generally agrees with our finding that it should focus its pesticide application monitoring efforts on pesticide law violators.

My staff and I will be pleased to discuss or clarify items in the report.

This report will be released to the public on September 28, 2000.

Sincerely,

Debbie Davenport
Auditor General

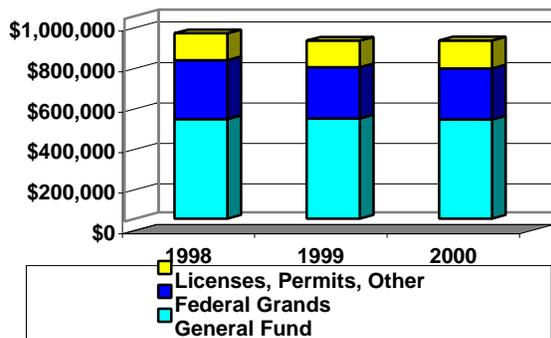


Program Fact Sheet

Department of Agriculture Pesticide Compliance and Worker Safety Program

Services: The Pesticide Compliance and Worker Safety Program provides the following services: 1) **Inspection**—Conducts pesticide use, worker safety, and recordkeeping inspections to ensure compliance with federal and state laws; 2) **Enforcement**—Ensures compliance with the State’s agricultural pesticide laws by conducting investigations of alleged agricultural pesticide law violations on its own initiative or in response to a complaint from the public and assesses fines and penalties against violators; and 3) **Licensing**—Licenses, tests, and trains agricultural pesticide applicators and pest control advisors to ensure competency.

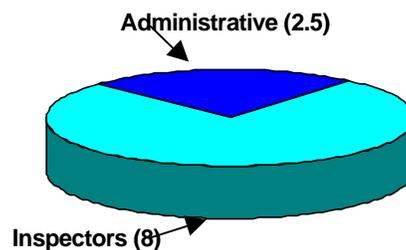
Program Revenue: \$880,000
(fiscal year 2000)



Facilities:

Program staff is located in three locations: the State Capitol and two satellite offices in Tucson and Yuma. The rent for the Tucson and Yuma offices is paid by the Department’s Non-Food Product Quality Assurance program because it uses the same inspection staff as the Pesticide Compliance and Worker Safety program.

Personnel: 10.5 full-time staff (fiscal year 2000)



Equipment: State vehicles are the primary equipment used. During fiscal year 2000, the Department leased 13 trucks through the Arizona Department of Administration at an approximate cost to the program of \$14,200.

Program Goals: (fiscal year 2000)

1. To provide an overview of inspection and regulatory measures.
2. To ensure the safety of pesticide workers and handlers.
3. To protect the public from unlawful pesticide exposure.

Adequacy of Performance Measures:

Overall, the goals and measures set forth for the Pesticide Compliance Worker Safety program are appropriate, and the Department has established input, output, outcome, efficiency, and quality measures for this program. However, the Department could make some improvements to the three program goals and associated performance measures.¹

- The program's first goal is not needed. Goal one is defined as providing an overview of inspections and regulatory measures. The performance measures included in this goal could be expanded and included in goals two and three. The Department recognizes the weakness of goal one and is working to instead develop more streamlined performance measures that reflect the unique issues and regulatory activities within the Pesticide Compliance and Worker Safety Program.

- The Department does not have sufficient measures to assess the efficiency of its inspection and investigation functions. For example, the Department has established efficiency measures, such as the percentage of actual FTEs compared to allocated FTEs and the number of days it takes an agricultural employer or other pesticide user to correct deficiencies. However, the Department lacks measures for determining how efficiently its inspectors are performing the inspection and investigation functions, such as the number or types of inspections and investigations each inspector performs.

The Department is currently re-examining the performance measures for this program and is taking steps to eliminate the measures that do not apply directly to program performance.

¹ The Department incorporated its first goal and associated performance measures in order to comply with guidelines specified in the Budget and Planning Instructions for fiscal years 2000 and 2001 issued by the Governor's Office of Strategic Planning and Budgeting.

SUMMARY

The Office of the Auditor General has conducted a performance audit of the Arizona Department of Agriculture's Pesticide Compliance and Worker Safety Program, pursuant to a June 16, 1999, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the Sunset review set forth in A.R.S. §§41-2951 et seq, and is the seventh in a series of audits to be conducted on programs within the Arizona Department of Agriculture.

The Department has been responsible for regulating agricultural pesticides in the State since 1991.¹ Regulating pesticides is important because these potentially toxic substances can damage human health, the environment, and property if not used properly. To achieve its mission, the Department performs various activities, including conducting inspections, providing testing and licensing to ensure pesticide applicators understand and follow pesticide laws, and conducting complaint investigations.

Department Lacks Sufficient Civil Penalty Authority (See pages 11 through 20)

The State's system for enforcing pesticide laws is greatly limited in its ability to assess adequate civil penalties against violators. Although state law gives the Department authority to issue fines of up to \$10,000 for serious violations, the Department's rules for implementing this statute define "serious" too narrowly, making it inconsistent with statute and causing virtually all pesticide misuse violations to be classified as nonserious. Nonserious violations carry a maximum penalty of \$500. Under the system the Department uses to set the exact amount of fines, most are less than \$150.

¹ The Structural Pest Control Commission regulates nonagricultural pesticide use.

Fines are generally so low that it appears to lessen their effect as a deterrent. For example, an aerial pesticide applicator was fined \$113 when the spray he was applying to a field drifted into a canal, contaminating the water and killing a large number of fish. Seven days later, the same applicator allowed spray from another field application to drift into a residential area, killing fish in the ponds of three different residents. His penalty for a repeat violation was \$182. Pesticide regulation agencies in a number of other states are able to issue much stronger fines for similar violations. For example, North Dakota assesses, on average, fines of \$400 each for pesticide drift violation that does not involve human exposure.

To improve the effectiveness of the Department's enforcement efforts, the Legislature and the Department should take steps to strengthen the Department's civil penalties. Specifically, the Legislature should consider revising A.R.S. §3-370 to increase the maximum civil penalty for nonserious violations from \$500 to \$1,000. Such a revision would provide the Department with broader fining authority from which to impose adequate fines. In addition, the Department should expand the definition of a serious violation as defined by Administrative Rule R3-3-501 and make it consistent with statute. Finally, the Department should revise its point/penalty system rule (Administrative Rule R3-3-506) to allow it to consider additional factors, such as the potential for health effects and environmental or property damage and the specific law violated, and provide it with the ability to impose fines that better reflect the violations committed.

**Department Should Focus Pesticide
Application Monitoring Efforts
on Pesticide Law Violators
(See pages 21 through 26)**

The Department could enhance the effectiveness of its pesticide application monitoring and regulatory enforcement efforts by requiring pesticide law violators to notify the Department in advance of making pesticide applications. Despite its potential usefulness as a regulatory tool, the Department has limited opportunity to monitor pesticide applications. For example, during

fiscal year 1999, the Department reports that it monitored only 77 of the more than over 26,800 agricultural pesticide applications it had on record. Several factors make it difficult for the Department to monitor more applications. Specifically, the 11 Department inspectors assigned to the program spend about 60 percent of their time ensuring compliance with pesticide laws, including performing federally mandated worker safety inspections and routine recordkeeping inspections, while the remaining 40 percent of their time is spent performing inspection activities for the Department's Non-Food Product Quality Assurance program. In addition, many pesticide applications take place outside of normal working hours, including during the late night or early morning hours. Finally, the Department is seldom aware of the time and location of most pesticide applications because applicators are not, for the most part, required to notify the Department in advance of applications.

Despite the low number of applications monitored by the Department, monitoring pesticide applications can aid the Department in its pesticide law compliance efforts in several ways. For example, monitoring can ensure that pesticides are properly mixed, loaded, and applied, and give the Department the opportunity to observe applicators' practices and take any necessary corrective action. Monitoring may also promote greater compliance with pesticide laws if applicators are aware that their activities may be monitored by the Department.

Because it has limited inspection resources and can monitor only a small percentage of the thousands of pesticide applications taking place each year, the Department should target its monitoring efforts toward pesticide law violators. Specifically, the Department should require applicators to provide advance notification of applications as part of the penalty for committing pesticide law violations.

(This Page Intentionally Left Blank)

TABLE OF CONTENTS

	<u>Page</u>
Introduction and Background	1
Finding I: Department Lacks Sufficient Civil Penalty Authority.....	11
Background.....	11
Department’s Fining Authority Is Insufficient.....	12
Penalty Structure Results in Weak Civil Penalties	17
The Legislature and Department Should Strengthen Civil Penalty Authority	19
Recommendations.....	20
Finding II: Department Should Focus Pesticide Application Monitoring Efforts on Pesticide Law Violators	21
Background.....	21
The Department Has Limited Opportunity to Monitor Pesticide Applications	22
The Department Should Require Application Pre-Notification from Violators	25
Recommendation.....	26
Agency Response	

TABLE OF CONTENTS (concl'd)

	<u>Page</u>	
Tables and Figures		
Table 1	Arizona Department of Agriculture Pesticide Compliance and Worker Safety Program Number of Licenses, Permits, and Certificates Issued Year Ended June 30, 2000 (Unaudited).....	6
Table 2	Arizona Department of Agriculture Pesticide Compliance and Worker Safety Program Statement of Revenues, Expenditures, and Changes in Fund Balance Years Ended June 30, 1998, 1999, and 2000 (Unaudited).....	7
Table 3	Arizona Department of Agriculture Pesticide Compliance and Worker Safety Program Point System for Administering Fines and Penalties As of July 2000.....	13
Table 4	Arizona Department of Agriculture Pesticide Compliance and Worker Safety Program Schedule of Fines and Penalties by Number of Points As of July 2000.....	14
Figure 1	EPA Worker Protection Standard Field Posting for Treated Fields.....	4
Figure 2	Pesticide Law Violation Definitions	12
Photo		
Photo 1	Worker wearing protective equipment and mixing pesticides.....	3

INTRODUCTION AND BACKGROUND

The Office of the Auditor General has conducted a performance audit of the Arizona Department of Agriculture's Pesticide Compliance and Worker Safety Program, pursuant to a June 16, 1999, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the Sunset review set forth in A.R.S. §§41-2951 et seq, and is the seventh in a series of audits to be conducted on programs within the Arizona Department of Agriculture.

Arizona's regulation of agricultural pesticides began in 1953 with the creation of the Board of Pest Control Applicators, later known as the Board of Pesticide Control. The Board's primary purpose was to control the use of agricultural pesticides by licensing custom applicators (those paid to apply agricultural pesticides).¹ Over the next several years, the Board's responsibilities were expanded to include the issuance of pesticide use permits to growers (farmers who use pesticides to produce crops) and regulating the storage and disposal of pesticides and pesticide containers. In 1986, the Legislature transferred responsibility for agricultural pesticide regulation to the Arizona Commission of Agriculture and Horticulture. However, Laws 1989, Chapter 162 combined the Arizona Commission of Agriculture and Horticulture with three other separate state agencies to form the Arizona Department of Agriculture (Department).

In addition, in 1986, the Legislature gave the Industrial Commission of Arizona the responsibility of developing and implementing a pesticide worker safety inspection program. However, the Legislature subsequently passed Laws 1990, Chapter 374, which transferred responsibility for the worker safety program on to the Department. Beginning on January 1, 1991, the Department assumed the responsibility for the State's pesticide regulation activities, including worker safety inspections.

¹ The Structural Pest Control Commission regulates nonagricultural pesticide use.

Pesticide exposure can result in damage to human health, property, and the environment.

Importance of Pesticide Regulation

Although pesticides are useful to society because they can kill potential disease-causing organisms and control insects, weeds, and other pests, without effective regulation and control, exposure to these potentially toxic substances can result in damage to human health, property, and the environment. While pesticides can negatively affect the health of the average adult, children are potentially more susceptible to the negative effects of pesticide exposure since their bodily systems are still maturing and do not provide the same level of protection as an adult's. Specifically, a 1993 National Research Council study indicated that children may be more sensitive or less sensitive than adults, depending on the pesticide to which they are exposed.¹ However, a 2000 U. S. General Accounting Office report determined that children are at greater risk from pesticide exposure than most adults because, pound for pound of body weight, children breathe more and eat more.² Persons with chemical sensitivities or chronic respiratory illnesses, such as asthma or allergies, are also more susceptible to the damaging effects of pesticide exposure. If used improperly, certain pesticides can also contaminate soil and water, endanger animals and wildlife, and damage crops and other property.

Pesticide Regulation in Arizona

Through the Pesticide Compliance and Worker Safety Program, the Department seeks to protect public health, agricultural workers, and the environment by ensuring the proper use and application of pesticides. The Department carries out this mission by performing various activities, including conducting inspections, providing training and testing to ensure pesticide

¹ National Research Council. *Pesticides in the Diets of Infants and Children*. Washington, D.C.: National Academy Press, 1993.

² United States General Accounting Office. Report to Congressional Requesters. *Pesticides: Improvements Needed to Ensure the Safety of Farmworkers and Their Children*. Washington, D.C.; GAO, March 2000.

Introduction and Background

applicators understand pesticide laws, and conducting complaint investigations.

To ensure compliance with state and federal pesticide and worker protection laws, the Department conducts three types of inspections:

- **Pesticide Use Inspections**—During pesticide use inspections, inspectors monitor pesticide handling, mixing, loading, storage, disposal, and application. Use inspections are usually unannounced. During fiscal year 2000, the Department reports that it conducted 75 pesticide use inspections.
- **Worker Safety Inspections**—Worker safety inspections ensure compliance with the Worker Protection Standard. The Worker Protection Standard, a federal regulation, applies to

Photo 1: Worker wearing protective equipment and mixing pesticides



Source: Virginia Tech, Department of Entomology.

all agricultural employers with employees who perform hand labor in a variety of settings that are treated with pesticides. The Standard requires training employees who handle pesticides as well as protecting them from exposure and providing emergency medical attention if necessary. During a worker safety inspection, inspectors confirm that farm workers have been properly trained and that employers

have posted the required information on recent applications and emergency information in a readily accessible, centrally located posting area. In addition, inspections ensure that employers provide adequate protective equipment as well

Figure 1: EPA Worker Protection Standard Field Posting for Treated Fields



as a decontamination site no more than a quarter mile from the workers that is not in a treated area or under restricted entry. Statute requires worker safety inspections to be unannounced. During fiscal year 2000, the Department reports that it conducted 97 worker safety inspections, addressing nearly 3,700 worker safety issues such as correct posting of safety information or proper training.

- **Recordkeeping Inspections**—When conducting recordkeeping inspections of pesticide sellers, pesticide applicators, and growers, the Department reviews paperwork such as sales and application records, product registrations, and applicator certifications to ensure completeness and timeliness. For example, inspectors review pesticide applicators' records to ensure that they have proper records on

file in accordance with administrative rule requirements. During fiscal year 2000, the Department reports that it conducted 85 recordkeeping inspections.

In addition to conducting inspections, the Department is also charged with enforcing the State's pesticide laws by conducting investigations of alleged pesticide law violations on its own initiative or through complaints received from the public. If an investigation confirms a violation, the Department can issue citations and assess fines and other penalties. In fiscal year 2000, the Department addressed and closed 91 investigation cases, including cases involving pesticide misuse, worker safety issues, improper recordkeeping, and illegal sales of pesticides. (See Finding I, pages 11 through 20, for more information on the Department's pesticide enforcement activities.)

Finally, in order to ensure that pesticides are safely handled and used, the Department issues nine different licenses, permits, or certificates and tests the competency of private and commercial pesticide applicators and agricultural pest control advisors. Specifically, the Department issues permits to allow dealers and distributors to sell pesticides and growers to purchase and use pesticides to grow crops. In addition, the Department tests and licenses custom applicators who are in the business of applying pesticides for growers as well as agricultural pest control advisors who make pest control recommendations for the control of pests. The Department also licenses the application equipment that custom applicators use. Finally, the Department tests and certifies private and commercial pesticide applicators and certifies government pesticide applicators who apply or supervise the application of restricted use pesticides. As illustrated in Table 1 (see page 6), the Department issued a total of 2,856 licenses, permits, or certificates during fiscal year 2000.

Pesticide Compliance and Worker Safety Resources

During fiscal year 2000 and as illustrated in Table 2 (see page 7), the Department received \$489,900 in General Fund monies to operate the Pesticide Compliance and Worker Safety Program. The Department also received approximately \$252,000 in fed-

eral monies for the program through a cooperative agreement with the U.S. Environmental Protection Agency (EPA). In addition, the Department collected over \$137,000 from issuing licenses and permits and collecting civil penalties from pesticide law violators. The Department has allocated 10.5 full-time equivalent staff (FTE) to the program, including approximately 8 inspector positions located throughout the State and approximately 2.5 administrative positions.

Table 1

**Arizona Department of Agriculture
Pesticide Compliance and Worker Safety Program
Number of Licenses, Permits, and Certificates Issued
Year Ended June 30, 2000
(Unaudited)**

Type	Number
Seller Permit	206
Regulated Grower Permit	1,267
Agricultural Aircraft Pilot License	66
Custom Applicator License	56
Custom Applicator Equipment License	185
Agricultural Pest Control Advisor License	246
Private Pesticide Applicator Certificate	532
Commercial Applicator Certificate	213
Government Applicator Certificate	<u>85</u>
Total licenses, permits, and certificates	<u>2,856</u>

Source: Auditor General staff analysis of Department of Agriculture license count for year ended June 30, 2000.

**Program Changes
and Improvements**

As part of the current audit, concerns identified in the Auditor General's 1990 performance audits of the Arizona Commission of Agriculture and Horticulture's role in pesticide regulation (see Auditor General Report No. 90-7) and the Industrial Commission of Arizona's role in the worker safety protection program (see Auditor General Report No. 90-9) were reviewed. While

Table 2

**Arizona Department of Agriculture
Pesticide Compliance and Worker Safety Program
Statement of Revenues, Expenditures, and Changes in Fund Balance
Years Ended June 30, 1998, 1999, and 2000
(Unaudited)**

	1998	1999	2000
Revenues:			
State General Fund appropriations	\$492,100	\$495,700	\$489,900
Federal grants ¹	290,519	252,446	252,279
Licenses and permits	118,795	116,350	117,665
Fines and forfeits	14,167	14,954	19,761
Other	<u>348</u>	<u>6</u>	<u>345</u>
Total revenues	<u>915,929</u>	<u>879,456</u>	<u>879,950</u>
Expenditures:			
Personal services	436,699	434,332	446,247
Employee related	113,034	109,385	106,984
Professional and outside services	21,044	30,984	48,175
Travel, in-state	50,446	45,379	26,631
Travel, out-of-state	6,034	1,793	2,738
Other operating	96,348	84,247	69,510
Equipment	<u>16,828</u>	<u>7,293</u>	<u>18,968</u>
Total expenditures	<u>740,433</u>	<u>713,413</u>	<u>719,253</u>
Excess or revenues over expenditures	<u>175,496</u>	<u>166,043</u>	<u>160,697</u>
Other financing uses:			
Net operating transfers out	42,794	34,765	22,891
Remittances to the State General Fund	<u>133,310</u>	<u>131,310</u>	<u>137,771</u>
Total other financing uses	<u>176,104</u>	<u>166,075</u>	<u>160,662</u>
Excess of revenues in over (under) expenditures and net transfers out	<u>\$ (608)</u>	<u>\$ (32)</u>	<u>\$ 35</u>

¹ Includes monies due from the U.S. Environmental Protection Agency but not collected as of June 30th of each fiscal year.

Source: The Arizona Financial Accounting System Accounting Event Transaction File for the years ended June 30, 1998, 1999, and 2000.

these reports highlighted several issues, the current audit reviewed the Department's performance relative to the following critical issues:

- **Pesticide Complaint Investigations**—The 1990 report found that, based on a review of 414 complaints of alleged pesticide law violations, the Arizona Commission of Agriculture and Horticulture was reluctant to conduct thorough

and timely investigations. Specifically, the report found that the Commission would not investigate complaints on its own initiative, failed to fully investigate cases even when evidence suggested a violation had occurred, and often did not follow proper investigative protocol. In addition, the report found that some investigations were not resolved in a timely manner because the Commission failed to issue citations within a six-month statutory time limit.

The Department's current manner of investigating cases of alleged pesticide law violations is very different and represents a vast improvement from the way these investigations were handled by the former Commission. First, the Department has developed a comprehensive set of operating procedures to guide its inspectors and other program staff in conducting and processing complaint investigations. In addition, a review of 50 investigative case files from fiscal years 1998 through 2000 showed that the Department adheres to its operating procedures and that its investigations were conducted in a thorough manner.

Further, the Department resolves cases within its statutory time limit. According to statute, the Department must issue a citation or notice of de minimus violation within six months after it confirms a violation. All 50 cases reviewed were resolved within the statutory time limit.

- **Worker Safety Inspections**—The 1990 Auditor General report on the Industrial Commission of Arizona's operation of the worker safety inspection program found that the Industrial Commission had done little to enforce worker safety rules and that these rules needed to be strengthened. Additionally, the Industrial Commission had conducted few inspections and had not established effective inspection procedures. The report recommended developing criteria for determining the number of FTEs needed to conduct worker safety inspections and strengthening some of the specific worker safety rules.

Since the 1990 audit, the Environmental Protection Agency (EPA) has implemented a worker safety program nationwide. Arizona's worker safety law serves to strengthen the

federal standard by means such as requiring enhanced training. By adopting EPA criteria, many issues of concern in the 1990 report have been addressed. While Arizona required posting in fields for certain pesticides prior to the inception of the federal worker protection standard, the federal standard now includes this requirement as well as a central posting location that lists recent pesticide applications. In addition to adopting the federal regulations, the Department has also strengthened its training program and designed inspection schedules with growing seasons in mind. Currently, the Department has allocated three FTE positions to conduct worker safety inspections.

Audit Scope and Methodology

This audit focuses on the Department's efforts to fulfill its responsibilities to investigate and resolve cases involving alleged violation of Arizona's pesticide laws and conduct inspections that address agricultural pesticide handling, mixing, loading, storage, disposal, and application. Several methods were used to study the issues addressed in this audit, including:

- Reviewing a random sample of 50 investigation cases involving alleged violations of pesticide laws that were completed and closed between July 1, 1997 and June 30, 2000, to determine the thoroughness and timeliness of investigations. The 50-case sample included all 27 complaints initiated by members of the public and a sample of 23 of the 146 (16 percent) Department-initiated complaint cases involving worker safety and pesticide use issues.
- Reviewing the entire population of 28 complaint cases that contained disciplinary actions for confirmed pesticide misuse violations that were issued between July 1, 1997 and June 30, 2000, to assess the quality of the Department's enforcement efforts.¹

¹ The confirmed cases of pesticide misuse identified through this review include the following acts: pesticide drift; improper pesticide container disposal; and using a pesticide in a manner contrary to its labeling.

Introduction and Background

- Reviewing applicable federal and state statutes and administrative rules to identify the program's responsibilities and authority.
- Contacting 14 states and U.S. Environmental Protection Agency officials regarding enforcement and pesticide application, drift, and container disposal issues.¹
- Observing Pesticide Compliance and Worker Safety Program inspections to determine the inspection processes for pesticide use, worker safety, and record inspections.
- Meeting with industry members including representatives of the Arizona Farm Bureau Federation, the Arizona Cotton Growers Association, and the Arizona Agricultural Aviation Association to obtain their views on the program. In addition, Department officials and program staff were also interviewed.

This report presents findings and recommendations in two areas:

- The Legislature and the Department should take steps to strengthen the Department's ability to impose adequate civil penalties against pesticide law violators; and
- The Department should focus its pesticide application monitoring efforts on violators of pesticide laws.

This audit was conducted in accordance with governmental auditing standards.

The Auditor General and staff express appreciation to the Director and staff of the Department of Agriculture for their cooperation and assistance throughout the audit.

¹ The following 14 states were contacted because they face pesticide regulation issues similar to Arizona's: Arkansas, Colorado, Hawaii, Indiana, Iowa, Kansas, Louisiana, Maryland, Minnesota, New Mexico, North Dakota, Oklahoma, Oregon, and Pennsylvania.

FINDING I

DEPARTMENT LACKS SUFFICIENT CIVIL PENALTY AUTHORITY

Several aspects of the current enforcement system hinder Department efforts to impose sufficient civil penalties on people who violate the State's pesticide laws. The Department's rules effectively limit most violations to the category of "nonserious," where the maximum penalty is \$500, and its system for determining civil penalties usually keeps the fines considerably below the maximum amount. As a result, most people who commit violations, including such things as killing fish by allowing pesticide spray to drift into canals and ponds, receive fines of \$150 or less—relatively little deterrent to discourage violators from breaking pesticide laws. The Department should change its definition of a "serious" violation and its system for determining penalty amounts. The Legislature should consider increasing the maximum civil penalty that can be assessed for nonserious violations.

Background

As part of its activities aimed at ensuring that agricultural pesticide users adhere to state pesticide laws, the Department investigates complaints of alleged pesticide law violation and issues citations and letters of warning to confirmed violators. Depending on the violation's type and magnitude, the Department can issue citations in three categories: serious, nonserious, or de minimus. As illustrated in Figure 2 (see page 12), statute defines each citation category and establishes maximum fines of \$10,000 for each serious citation and \$500 for each nonserious citation. De minimus citations have no fines attached.

The point/penalty system the Department currently uses as promulgated in administrative rule by the Arizona Commission for Agriculture and Horticulture in 1989 specifies a range of points that may be assessed based on the circumstances for

each violation. As shown in Table 3 (see page 13), for example, a violation that results in the poisoning of workers or the public can be assessed up to 100 points.

Figure 2: Pesticide Law Violation Definitions

- **Serious:** A violation that produces a substantial probability that death or serious physical harm could result. Maximum fine—\$10,000.
- **Nonserious:** A violation that may have had a direct or immediate relationship to safety, health, or property damage. Maximum fine—\$500.
- **De minimus:** A violation which, although undesirable, has no direct or immediate relationship to safety, health, or property damage. No fine.

Source: Arizona Revised Statutes §3-361 and §3-370.

Based on the total number of points assessed, enforcement action is determined. For example, Table 4 (see page 14) shows that a nonserious violation with 53 points or less could result in a fine of \$1 to \$150, while a violation with 108 or more points could yield a fine ranging from \$301 to \$500.

Department's Fining Authority Is Insufficient

The Department's rules and procedures limit its ability to issue strong civil penalties. Although the Department theoretically can fine violators up to \$10,000, the practical reality is that its rules and procedures generally prevent it from imposing significant penalties. These problems with the Department's enforcement capabilities have been pointed out before, and while the Department has previously proposed changes to those rules and procedures, it has not implemented these changes.

Rules, statute, and point system hinder Department's enforcement abilities—While the Department has the authority to enforce the State's pesticide laws, its ability to impose adequate fines is limited. Specifically:

Table 3

**Arizona Department of Agriculture
Pesticide Compliance and Worker Safety Program
Point System for Administering Fines and Penalties¹
As of July 2000**

Investigation Finding Category	Points
Health Effects	
No evidence of human exposure to pesticides	0
Evidence of human exposure but treatment by health care provider not required	5
Exposure to pesticides that required treatment by a health care provider but did not result in pesticide intoxicification	6 to 10
Exposure to pesticides that required either hospitalization for less than 12 hours or treatment as an outpatient for 5 consecutive days or less by a health care provider	11 to 30
Exposure to pesticides that required hospitalization for 12 hours or longer, or treatment as an outpatient, for more than 5 consecutive days by a health care provider	31 to 60
Exposure to pesticides resulting in death from pesticide intoxicification	100
Environmental Consequences and Property Damage	
No environmental or property damage	0
Water source contamination	1 to 10
Soil contamination causing economic damage	1 to 10
Nontarget bird kills	1 to 10
Nontarget fish kills	1 to 10
Nontarget kills involving game or furbearing animals	1 to 10
Any property damage	1 to 10
Air contamination causing official evacuation	1 to 10
Killing 1 or more threatened or endangered species	1 to 10
Killing 1 or more domestic animals	1 to 10
Culpability	
Points are determined based on whether the violation was <i>unknowingly</i> , <i>knowingly</i> , or <i>willfully</i> committed	0 to 50
Prior Violations or Citations	
Points are determined based on the number of violations committed within three years from the date of the current violation	0 to 70
Duration of Violation	
Points are determined by how long the violator allowed the violation to continue after being notified by the Department	0 to 40
Wrongfulness of Conduct	
Assesses the damage or threat to public health, safety, property, and the environment	1 to 50

¹ Points are used to determine fines and penalties. See Table 4, page 14.

Source: Arizona Administrative Code R3-3-506A, which contains the point/penalty rules that the Department uses for assigning points to both serious and nonserious violations.

- **Rules define most violations as nonserious**—While statute defines a serious violation as one that produces a substantial probability that death or serious physical harm could result, the Department’s rule limits its ability to clas-

Table 4

**Arizona Department of Agriculture
Pesticide Compliance and Worker
Safety Program
Schedule of Fines and Penalties
by Number of Points
As of July 2000**

Point Total	Fine	Penalty
Nonserious Violations		
✓ 53 points or less	\$1 to \$150	1 to 3 months’ probation
✓ 54 to 107 points	\$151 to \$300	4 to 6 months’ probation
✓ 108 points or more	\$301 to \$500	7 to 12 months’ probation
Serious Violations		
✓ 46 points or less	\$1,000 to \$2,000	1 to 3 months’ probation
✓ 47 to 93 points	\$2,001 to \$5,000	4 to 6 months’ probation
✓ 94 points or more	\$5,001 to \$10,000	7 to 12 months’ probation

Source: Arizona Administrative Code R3-3-506B, which contains the schedule that the Department uses for determining fines and penalties for both serious and nonserious violations.

sify a violation as serious. The Department’s rule narrows this definition to include only violations involving human exposure to highly toxic or restricted use pesticides in a concentration that causes toxic levels when absorbed through the mouth or skin. According to this definition, the Department can classify a violation as serious only if a person has a severe medical reaction as a result of being exposed to a highly toxic or restricted use pesticide. Because the definition for a serious violation in rule does not

consider the *potential* for serious harm, which is provided for in statute, virtually all pesticide misuse violations must be classified as nonserious.

The maximum fine for a nonserious violation is \$500.

- **Maximum fines for nonserious violation are low**—One difficulty presented by treating so many violations as nonserious is that the maximum civil penalty for each nonserious citation issued is \$500. This amount is low when compared with the maximum fines provided for in other states. A survey of agricultural pesticide regulation agencies in other states revealed that 8 of the 9 states contacted have established maximum fines for nonserious or moderate violations ranging from \$1,000 to \$5,000 per violation. For example, Hawaii may fine commercial pesticide applicators up to \$5,000 for a violation and Maryland may penalize a violator up to \$2,500 for a first violation and up to \$5,000 for any subsequent violations.
- **Point system structure hinders ability to issue adequate civil penalties**—The structure of the point/penalty system that the Department uses further reduces the maximum fines it is able to impose. For the 21 citations and fines for pesticide misuse the Department issued from July 1997 through June 2000, the Department assigned points to violators ranging from 15 to 105 for each violation. Fifteen of the 21 citations received 53 points or less, creating a maximum fine of \$150. The other 6 violations received from 54 to 105 points, creating a maximum fine of \$300.

These low point totals and fines result because the point/penalty system does not allow the Department to assign many points. For example, as illustrated in Table 3 (see page 13), although the system allows for the assessment of up to 100 points for violations with health effects, in reality, unless a person's exposure to pesticides results in hospitalization for up to a 12-hour period, the Department cannot assign more than 30 points to the violator. In fact, the Department cannot assign more than 60 points in this category unless the exposure results in death. Additionally, while the system allows the Department to assign points for violations that result in environmental or property damage, the

Department can assign a maximum of only 10 points for a violation resulting in air contamination that requires an official evacuation.

- **System does not consider the specific law violated**—Although the point/penalty system delineates a variety of factors that must be considered when assessing points to a violation, it does not consider the specific law that was violated. Instead, the system assigns penalties based on the outcome of the violation and not on the violation itself. For example, if a pesticide drift violation was committed, the point/penalty system considers the consequences of the violation and the violator’s conduct, but not the actual violation itself. Thus, the same point system used to determine penalties for pesticide drift violations is used to determine the penalty for failing to maintain the proper pesticide application records. Conversely, in Indiana, Maryland, and Oklahoma, penalties for pesticide law violations are based on the type of violation committed.

1990 audit report also highlighted weakness of the point/penalty system—The 1990 Auditor General report of the State’s pesticide regulation activities also found that the point/penalty system was a hindrance to effective enforcement, citing many of the same problems that are identified in the current audit. The 1990 report recommended that the point/penalty system be revised to strengthen enforcement ability and noted the fact that the point/penalty system does not adequately address conduct that may have the potential for harm but did not result in actual harm. In addition, the 1990 report noted that the rule defining serious violations is inconsistent with the statutory definition of a serious violation and is too limited in scope. The report recommended that rather than narrowly defining a serious violation, the rule should be revised to comply with statute and provide a nonexclusive list of acts that are considered serious violations. Finally, the report raised the concern that the points assigned to violations were insufficient. The Department indicated that it had proposed rule changes to the point/penalty system in the past, but it has not implemented these changes.

A previous Auditor General report identified similar weaknesses in the point/penalty system.

Penalty Structure Results in Weak Civil Penalties

As a result of its limited civil penalty authority, the Department's enforcement actions against pesticide law violators appear inadequate. While the Department takes action against pesticide law violators, it can issue only minimal fines. By contrast, several other states, such as Arkansas, Maryland, and North Dakota, issued stronger penalties for similar pesticide misuse violations. Additionally, the Department can take much stronger action for worker safety law violations.

Most of the citations the Department issued had fines of less than \$150.

Most fines issued are less than \$150—While the Department confirms violations and issues citations as a result of its investigation activities, the resulting fines in many cases are less than \$300. Of the 21 nonserious pesticide misuse violations with fines issued between July 1997 and June 2000, the Department assessed fines ranging from \$42 to \$294, with 15 of the fines being less than \$150. Typical examples include:

- A man complained to the Department that his vehicle was sprayed with pesticides as he was driving on an interstate freeway. In fact, some of the pesticides actually entered his vehicle through an open window. Using the point/penalty system, the Department assigned 20 points for the pesticide drift violation, and issued a nonserious citation to the applicator along with a fine of \$57.
- A woman complained to the Department that she was sprayed with pesticides as an aerial applicator flew over her home. The Department's investigation confirmed that a pesticide drift violation had occurred. However, working within the confines of the point/penalty system, the Department was able to assign only 26 points to the applicator, resulting in a nonserious citation and a penalty of \$74.
- An aerial applicator applying pesticides to a field allowed some of the pesticides to drift into a nearby canal, contaminating the canal water and killing a large number of fish. The Department assigned him 20 points for the environmental consequences and property damage factor, including 10 points each for contaminating the canal water and for

killing a large number of fish in the canal. The applicator received a total of 40 points, resulting in a nonserious citation and a penalty of \$113.

Seven days later, the applicator once again was applying pesticides to a field and allowed the pesticides to drift into a residential area, killing fish in the ponds of three different residents. For this violation, the Department assigned points for the prior violation. However, the point system allows the Department to assign only 20 points for a violation that is the same/substantially similar to a previous violation committed by the same applicator. Therefore, this violation resulted in a total of 65 points for the applicator in addition to a nonserious violation and a penalty of \$182.

Other states issue stronger penalties for pesticide misuse violations—Although many other states do not assign points, their penalty systems allow them to assign more significant fines to pesticide law violators. For example, North Dakota receives between 40 and 50 complaints of pesticide drift each year and assesses, on average, fines of \$400 each for drift violations that do not involve human exposure. Further, in 1999, North Dakota assessed penalties of \$2,575 and \$4,500 against two individuals who committed pesticide drift violations that involved possible human exposure, despite the fact that the human exposure aspect of the cases was never proven. Similarly, while Maryland and Arkansas do not issue fines for a first pesticide drift offense that does not involve human exposure, Maryland officials could assess fines ranging from \$300 to \$1,000 for subsequent drift violations. Likewise, a second drift offense without human exposure in Arkansas will result in a penalty of \$200 to \$600, with the recommended penalty being \$400.

Department can pursue stronger civil penalties for worker safety violations—The Department's enforcement authority for worker safety law violations allows it to assess much stronger civil penalties. Specifically, the base fines for a violation of the worker protection laws range from \$250 to \$500 and can be adjusted up or down based on a variety of factors, such as the effect of the violation on human health, compliance history, and culpability. For example, the Department issued fines totaling \$960 to a grower for failing to show proof that all agricultural employees were properly trained to work among pesticides

The Department can assess stronger civil penalties for worker safety law violations.

and for not providing proper equipment, such as soap, single use towels, coveralls, and emergency eye wash, for workers to use in case of pesticide contamination.

The Legislature and Department Should Strengthen Civil Penalty Authority

In order to improve the effectiveness of the Department's enforcement efforts, the Legislature and the Department should take steps to strengthen the Department's civil penalty authority. Specifically:

- The Legislature should consider revising A.R.S. §3-370 to increase the maximum civil penalty for nonserious violations from \$500 to \$1,000. Such a revision would provide the Department with a broader range from which to establish adequate fine amounts. In 1998, the Department attempted to increase the statutory maximum fine for a nonserious violation from \$500 to \$1,000. However, the Department's attempts to make this change were unsuccessful due to strong industry opposition.
- The Department should expand the definition of a serious violation as defined by Administrative Rule R3-3-501 to make it consistent with statute.
- The Department should revise the point/penalty system rule (Administrative Rule R3-3-506) to allow it to consider additional factors and provide it with the ability to assign point totals that better reflect the violations committed. For example, the Department could revise two of its current penalty factors, health effects and environmental consequences and property damage, to consider the potential for health effects or environmental or property damage. Further, the Department could add a component that assigns points for violating the specific pesticide law. In addition, the Department should revise the point ranges assigned to the various factors to enable it to assign higher point totals that better reflect the seriousness of violations committed.

Changes in statute and administrative rule are needed to strengthen the Department's civil penalty authority.

Recommendations

1. The Legislature should consider revising A.R.S. §3-370 to increase the maximum penalty for nonserious violations of pesticide laws from \$500 to \$1,000.
2. The Department should revise Administrative Rule R3-3-501 to expand the definition of a serious violation and make it consistent with the statutory definition.
3. The Department should revise the point/penalty system set forth in Administrative Rule R3-3-506 by:
 - a. Including additional factors and assigning appropriate points for (1) the potential for harm; and (2) the specific violation committed to consider when it determines penalties for pesticide law violators; and
 - b. Revising the point ranges for each of the system's factors to enable it to assign higher point totals that better reflect the seriousness of violations committed.

FINDING II

DEPARTMENT SHOULD FOCUS PESTICIDE APPLICATION MONITORING EFFORTS ON PESTICIDE LAW VIOLATORS

Requiring advance notice of pesticide applications by pesticide law violators could further improve the Department's enforcement and monitoring efforts. Although potentially an important regulatory tool, the Department currently monitors only a very small percentage of the thousands of pesticide applications taking place in the State each year and does not focus its monitoring efforts on persons with prior violations. The Department's other pesticide inspection responsibilities, the timing of applications, and limited pre-notification of pesticide applications prevent it from efficiently monitoring more applications. However, the Department could require, as part of its enforcement and monitoring efforts, advance notification of pesticide applications from applicators who have committed pesticide misuse violations, based on the magnitude of the violation and the applicator's violation history.

Background

According to statute, the Department is charged with prescribing measures to control, monitor, inspect, and govern pesticide use. Monitoring can ensure the handling, mixing, loading, storage, disposal, and application of pesticides is conducted according to established safety requirements. One way of monitoring pesticide use is to be present as pesticides are being prepared and applied to a crop field. Currently, the Department employs 11 inspectors who spend part of their time conducting pesticide use inspections, including inspections of the selling, processing, storing, transporting, handling, and application of pesticides and disposal of pesticide containers.

The Department has responsibility to ensure the proper use of pesticides.

The Department Has Limited Opportunity to Monitor Pesticide Applications

Despite its potential usefulness as a regulatory tool, the Department has limited opportunity to monitor pesticide applications. For example, during fiscal year 1999, the Department only monitored 0.3 percent of the more than 26,800 applications it had on record. Several factors impact the Department's ability to monitor applications, including the need to perform other inspection responsibilities, the timing of pesticide applications, and limited pre-notification of pesticide applications.

Department monitors a small percentage of pesticide applications—While the Department's current inspection methods allow it to observe many different activities related to pesticide use, including pesticide handling, mixing, loading, storage, disposal, and application, they provide very few opportunities for the Department to observe pesticide applications. For example, the Department reports that it monitored only 77 of the over 26,800 (0.3 percent) agricultural pesticide applications that it had on record during fiscal year 1999. Additionally, these represent only the applications reported by custom applicators, persons who apply pesticides for hire or by aircraft whether for hire or not, and does not include the many more thousands of applications that were performed by private applicators who are not required to report their application activities. According to the Department's administrative rules, custom applicators must notify the Department of every pesticide application they perform. While the Department does not know the number of applications made by private applicators, who are typically growers or employees of growers applying pesticides to the grower's own crops, the Department reports that during fiscal year 2000, there were 532 individuals certified as private applicators.

The Department monitored only 77 of the over 26,800 pesticide applications that took place during fiscal year 1999.

Monitoring pesticide applications can assist the Department in its pesticide law compliance efforts.

Despite the low number of applications monitored by the Department, monitoring pesticide applications can aid the Department in its pesticide law compliance efforts in several ways. First, monitoring can ensure that pesticides are properly mixed, loaded, and applied, especially during applications that can present increased risk to human health and the environment. Specifically, pesticide drift, a condition that exists when pesticides drift away from their intended target, can result from an im-

proper pesticide application and can potentially harm people, animals, and the environment. Second, although few violations may occur if an applicator is aware that inspectors are monitoring the application, it gives the Department the opportunity to observe applicators' actual practices and see that corrective action is taken if needed. This could be especially important for applicators with violation histories as monitoring would provide the Department with the opportunity to ensure compliance with pesticide laws. Finally, monitoring could have a deterrent effect because applicators may be less likely to violate pesticide laws if they know that their activities may be monitored by the Department.

Several factors impact Department's ability to monitor—

According to the Department, it does not monitor more pesticide applications for several reasons, including:

- **Other Inspection Responsibilities**—The Department has other inspection responsibilities in addition to its pesticide application monitoring duties. The Department has assigned 11 inspectors who spend approximately 60 percent of their time ensuring compliance with pesticide laws by conducting pesticide use inspections as well as federally mandated worker safety and routine recordkeeping inspections. Further, these same inspectors must spend about 40 percent of their time performing inspection activities for the Non-Food Product Quality Assurance Program, where they collect samples of feed, fertilizers, pesticides, and seeds at retail stores throughout the State for testing to ensure the accuracy of label statements and product guarantees. Therefore, it would be difficult for them to effectively and efficiently monitor more than a small percentage of the thousands of pesticide applications taking place within the State each year.
- **Timing of Applications**—Many applications take place in the early morning or late night hours because the cooler temperatures and decreased air movement minimize the possibility of drift. While the Department has occasionally monitored applications during these times, the Department typically monitors pesticide use activities between the normal working hours of approximately 7:00 a.m. and 5:00 p.m.

- **Limited Pre-Notification of Applications**—The Department is seldom aware of the exact time or location of most pesticide applications. As noted above, custom applicators must notify the Department of the applications they perform, but only after the application has already occurred. As a result, Department inspectors will usually monitor pesticide applications while in-transit to other inspection responsibilities if they observe applications occurring. While this allows the Department to conduct unannounced inspections, without knowing the place and time of an application, inspectors infrequently encounter applications.

While the Department is not typically notified in advance of the time and location of pesticide applications, there are two instances in which applicators are required to notify the Department prior to applying pesticides.

The Department receives advance notice of two specific types of pesticide applications.

- According to statute, applicators are to make every reasonable effort to notify the Department at least 24 hours in advance of making an aerial application within a pesticide management area (PMA), which is typically an urban area adjacent to farmlands with a history of concerns regarding aerial pesticide applications. During fiscal year 1999, the Department reports that it received advance notice of 28 applications occurring within the State's one active PMA and monitored 22 of these applications.¹
- The Department's administrative rules require that the Department be notified at least 24 hours in advance of the exact time, date, and location of an application of experimental use pesticides, which are pesticides that are applied to gather the information and data necessary for registering the pesticide. During fiscal year 1999, the Department reports that it received advance notice of 7 experimental use pesticide applications and monitored 4 of these applications.

¹ Statute gives the Department's Director authority to designate an area as a PMA, based on specific statutory criteria. Currently, the State has one PMA located in the farming area adjacent to the community of Marana. Historically, Arizona had additional PMAs, including some in Maricopa County, but these areas no longer meet the definition of a PMA.

The 35 advance notices received during fiscal year 1999 represent a small fraction of the thousands of applications that took place during that fiscal year.

In addition to receiving mandated advance notice of certain types of pesticide applications, the Department occasionally receives voluntary requests for application monitoring to validate the applicators' practices. Specifically, during fiscal year 1999, the Department received four voluntary requests for monitoring from applicators and chose to monitor one of these applications.

The Department Should Require Application Pre-Notification from Violators

Because it has limited inspection resources and can only monitor a small percentage of pesticide applications taking place each year, the Department should target its monitoring efforts toward those applicators with violation histories. To make this monitoring feasible, the Department should require, as part of its enforcement efforts, advance notification of pesticide applications from custom and private applicators who have committed pesticide use violations, such as pesticide drift violations. Currently, the Department reports that 14 of the 56 custom applicators licensed by the Department and 18 of the 532 private applicators certified by the Department have been cited for violations as a result of their application activities during the past three fiscal years.

To better focus its limited inspection resources on pesticide law compliance, the Department should target its monitoring efforts toward violators.

The Department could require custom and private applicators to provide advance notification of applications as part of the penalty for committing a pesticide use violation. The Arizona Structural Pest Control Commission requires violators of structural pesticide laws to provide advance notice of all termite pretreatments for a specific time period. Additionally, the Department should consider the magnitude of the violation committed in addition to the applicator's violation history when determining the length of time the applicator will need to provide advance notice of applications.

Recommendation

1. The Department should require, as part of its enforcement penalties, custom and private applicators who commit violations to provide advance notice of pesticide applications for a specified period of time, based on the magnitude of the violation committed and the applicator's violation history.

(This Page Intentionally Left Blank)

Agency Response

(This Page Intentionally Left Blank)

September 7, 2000

The Honorable Debra K. Davenport
Auditor General
Office of the Auditor General
2910 North 44th Street, Suite 410
Phoenix, Arizona 85018

Dear Ms. Davenport:

Enclosed is the Arizona Department of Agriculture's response to the Pesticide Compliance & Worker Safety audit.

The Department is pleased to accept the report's recognition of the numerous improvements that have been made to this program since it was last audited in 1990 as part of the Agriculture and Horticulture Commission. Further, the Department has already begun to identify ways to improve further upon the issues documented in your report and has begun implementing the recommendations where agreed.

We extend our appreciation to the audit team for their professionalism and attention to detail. I certainly appreciate their willingness to seek out the Department's input and clarification of issues identified in this report.

Sincerely,

A handwritten signature in black ink that reads "Sheldon R. Jones". The signature is written in a cursive style with a large, stylized initial 'S'.

Sheldon R. Jones
Director

OVERVIEW

The Arizona Department of would like to thank the Auditor General's staff for the professional manner in which the audit was performed.

We believe the ADA, while it continues to identify methods of improving its delivery of service to Arizona's growing agricultural industry and the public as a whole, is a good example of how government should strive to work. We take very seriously our mission and our charge to regulate and support Arizona agriculture in manner that promotes farming, ranching and agribusiness while protecting consumers and natural resources.

While this cabinet level agency was created only ten years ago, to serve and regulate Arizona's agriculture industry, a number of things have and continue to change about the industry we serve. Foremost is the changing face of our customers, which reflects the industry as a whole. Arizona is internationally renowned for its diverse agricultural production. From artichokes to cattle, cotton and citrus to shrimp and watermelons, Arizona is continuously increasing its agricultural diversity. It is entirely fascinating to observe the customers that call on us every day. The ADA is constantly asked to service more than the program crops of wheat, cattle, cotton and dairy. Ten years ago, the aquaculture, ratite, custom slaughter, wine and massive nursery industry did not exist as they do today. Because of the changing face of our customers and the public's demands for faster, more efficient service, the ADA recognizes more must be done to meet the challenges we face today and those we will face in the future.

The Department appreciates the attention the Auditor General's staff has paid to the unique responsibilities and critical functions of the Pesticide Compliance and Worker Safety Program. As the report highlights, the program has made significant improvements to its delivery of service to both the regulated industry and the public as a whole since your office last audited the program in 1990. The report fails to mention the synergy between the Pesticide Compliance and Worker Safety program and the Department's compliance assistance efforts in its Agricultural Consultation and Training program. While entirely separate and each maintaining the confidentiality of their involvement with the regulated industry, the two programs both provide education and compliance training to Arizona's agriculture industry. By focusing much of its efforts on educating the agriculture industry about state and federal laws governing chemical labeling, applications, and use, the Arizona Department of Agriculture ensures the protection of the public, environment and viability of this state's agriculture industries.

While this is of course a positive investment of resources, the Department believes that a regulatory program to consistently enforce Arizona's pesticide regulations provides both the public and the industry with a high level of service. As such, the Department is open to further exploring the report's findings and recommendations as warranted.

The findings and recommendations of this report will be incorporated into our discussions with other state agencies and other agency stakeholders to further refine the system for meeting the dynamic and ever changing needs of Arizona's agriculture industry and the public at large.

While the Department intends to incorporate the findings and recommendations of this report with its stakeholders, it is important to note that caution should be exercised to not make presumptions about agricultural pesticide use (or potential misuse) that is inconsistent with practices in 2000.

Today's agricultural pesticides are specific as to labeling, use, and manner of handling. They are highly regulated, expensive products, and the United States has a whole generation of growers who are responsible, trained and licensed in appropriate use. Government cannot always be on site with each chemical use. Therefore, the manufacturers, science and government have formed processes where education, testing and licensing are of the utmost importance.

Arizona has a generation of growers who are responsive and responsible to economics, safety and the environment. They must balance economic realities and production efficiencies with social and environmental issues. This balance has been demonstrated over countless applications of appropriate pesticide use.

The audit function or check and balance of enforcement must be viewed within a broad context of training and awareness, and the statistics continue to bear out responsible and voluntary compliance. Regulation and compliance are broad-based processes and it would be inappropriate to take specific violation incidents and generalize about industry practices as a whole. Rules and regulations are also a collaborative process which must be based upon need and good peer review science, and it would be unfair to base risk assessments on undocumented fear or presumptions as to the attitudes and positions of one industry over another.

When violations occur, one must consider intent, resulting damages and remedies that may preclude further incidents. There is no evidence to suggest that simply increasing fines is more appropriate than more education or exercise of better care.

The analogy is often made to traffic enforcement. Under the most diligent enforcement efforts, a certain percentage of drivers are willfully going to disobey. This analogy is flawed for the present topic. Automobile drivers will often assume they are above the law, or do not consider their actions as having consequences. The agricultural community is much less isolated from consequences. They are accustomed to detailed regulation and their livelihoods are wrapped into their consciousness and behavior. Ask any grower – if they can avoid pesticide applications, they will. Ask any Arizona cotton grower, who has been able to dramatically curtail pesticide use with other technologies. Alternatives are becoming available because of the commitment Arizona's producers have to their communities, their environment, and the consuming public.

To be certain, violators must be properly classed as to the level of offense and seriousness, and the tools of enforcement need to be able to match the infraction. Regulation must have integrity, but it must also have context.

Pesticides are used everyday at our businesses, our homes, in our playing fields and in commercial agriculture. Serious readers of this audit need to bear this in mind. Today's agricultural pesticide use is perhaps the most highly regulated and watched of all of these areas. Again, modern Arizona agriculture is responsible and responsive and only the uninformed would suggest they are obstructionist or out of step with mainstream science and needs to protect the public and the environment.

The auditors do point out the view that fines for offenses should be increased and that violators should have to make advance reports of their applications. These are issues worthy of further public debate and the Department is willing to sponsor future discussions through the revision of its existing rules. As important was the Auditor General's finding that our current investigation results are comprehensive, thorough and timely. Further, they give credit to strengthened training programs and to worker safety, far greater than previous audit findings. Credit in these areas should also be given to the Arizona's modern agriculture leadership.

Finding I: The Department Lacks Sufficient Civil Penalty Authority

Recommendation: The Legislature should consider revising A.R.S. §3-370 to increase the maximum penalty for nonserious violations of pesticide laws from \$500 to \$1,000.

Agency Response: *The finding of the Auditor General is not agreed to but the recommendation will be implemented consistent with legislative mandate.*

Agency Explanation: The Department concedes that its penalty authority is more limited than those of other states. But, it is the contention of this Department that monetary penalties are only one type of enforcement tool available for monitoring and ensuring compliance of the state's pesticide laws. In fact, the Department has developed numerous opportunities for the regulated industries to become educated in the various provisions of the law and strives to provide compliance assistance where responsible, which is evidenced by the relatively low number of pesticide violations in Arizona.

Recommendation II: The Department should revise Administrative Rule R3-3-501 to expand the definition of a serious violation and make it consistent with the statutory definition.

Agency Response: *The finding of the Auditor General is not agreed to but a different method of dealing with the recommendation will be implemented.*

Agency Explanation: The Department is actively developing proposed changes to Administrative Rule R3-3-501 to make the definition of serious violation consistent with the statutory definition.

Recommendation III: The Department should revise the point/penalty system set forth in Administrative Rule R3-3-506 by:

- a. Including additional factors and assigning appropriate points for (1) the potential for harm; and (2) the specific violation committed to consider when it determines penalties for pesticide law violators; and
- b. Revising the point ranges for each of the system's factors to enable it to assign higher point totals that better reflect the seriousness of violations committed.

Agency Response: *The finding of the Auditor General is not agreed to but a different method of dealing with the recommendation will be implemented.*

Agency Explanation:As was stated in the agency's explanation of its response to Recommendation II above, the Department has initiated a review of its Administrative Rules and, as such, is prepared to review the sufficiency of the point/penalty matrix described in this report.

However, while the Department is pursuing revision of its Administrative Rules, it is critical to note that the Department does not concur with the audit recommendation's assessment of the manner in which penalties and violations are determined and classified. Any changes to the rule will be based upon empirical knowledge of chemical management, appropriate risk assessment, and good peer review science.

Finding II: **Department Should Focus Pesticide Application Monitoring Efforts on Pesticide Law Violators**

Recommendation: The Department should require, as part of its enforcement penalties, custom and private applicators who commit violations to provide advance notice of pesticide applications for a specified period of time, based on the magnitude of the violation committed and the applicator's violation history.

Agency Response: *The finding of the Auditor General is agreed to and a different method of dealing with the recommendation will be implemented.*

Agency Explanation:The Department believes there is value to pre-application notification requirements in certain situations. For example, the Department believes it is responsible to institute such requirements as a condition in negotiated settlements or as a consequence of repeated violations. One must also distinguish between levels of violation or infraction. Certainly not all levels of infraction would warrant a "pre-requirement" notice of pesticide application. At the same time, one must keep in mind the underlying premise of licensing, regulation and compliance as it applies to *any* type of pesticide application, whether it is agricultural in nature or not; i.e. government cannot be at all places at all times, nor should it be.

Other Performance Audit Reports Issued Within the Last 12 Months

99-18	Department of Health Services— Bureau of Epidemiology and Disease Control Services	00-6 00-7	Board of Medical Student Loans Department of Public Safety— Aviation Section
99-19	Department of Health Services— Sunset Factors	00-8	Department of Agriculture— Animal Disease, Ownership and Welfare Protection Program
99-20	Arizona State Board of Accountancy	00-9	Arizona Naturopathic Physicians Board of Medical Examiners
99-21	Department of Environmental Quality—Aquifer Protection Permit Program, Water Quality Assurance Revolving Fund Program, and Underground Storage Tank Program	00-10	Department of Agriculture— Food Safety and Quality Assurance Program and Non-Food Product Quality Assurance Program
99-22	Arizona Department of Transportation A+B Bidding	00-11	Arizona Office of Tourism
00-1	Healthy Families Program	00-12	Department of Public Safety— Scientific Analysis Bureau
00-2	Behavioral Health Services— Interagency Coordination of Services	00-13	Arizona Department of Agriculture Pest Exclusion and Management Program
00-3	Arizona's Family Literacy Program	00-14	Arizona Department of Agriculture State Agricultural Laboratory
00-4	Family Builders Pilot Program	00-15	Arizona Department of Agriculture Commodity Development Program
00-5	Department of Agriculture— Licensing Functions		

Future Performance Audit Reports

Arizona Department of Agriculture—Sunset Factors

Arizona State Boxing Commission